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**FISHERIES**

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# NOAA Aquaculture Update





Do Something  
Good For The  
Environment,  
Eat More  
Aquacultured  
Shellfish!



Eat More Fish!!!!  
Support Ocean Farmed Seafoods!!!!  
Support Maine's Working Waterfronts!!!!!!



# Wellfleet SPAT

Shellfish Promotion and Tasting, Inc.

*Producers of the Wellfleet OysterFest™*

[wellfleetoysterfest.org](http://wellfleetoysterfest.org)

## *Taste the Mercur*

Wellfleet Oysters & Clams

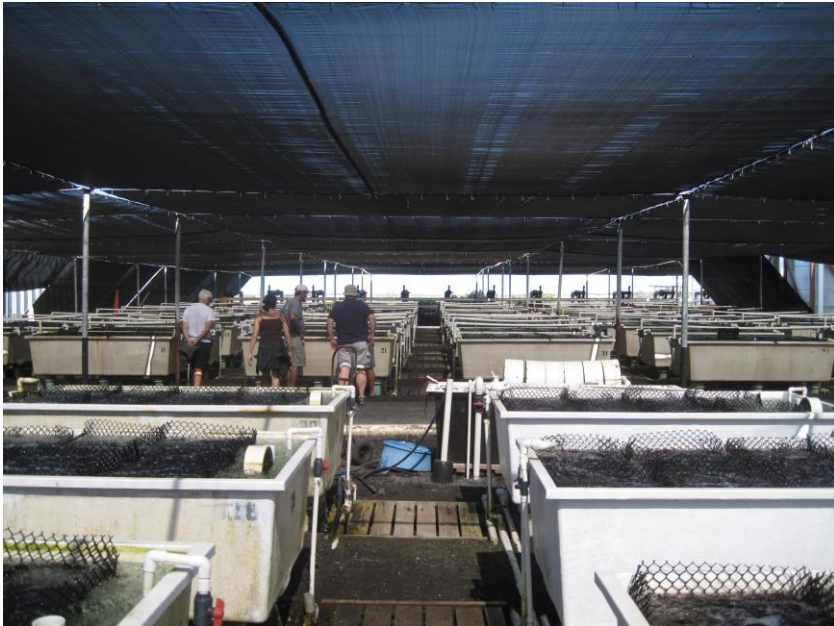
### CAPE COD COMMERCIAL FISHERMEN'S ALLIANCE

*Small Boats. Big Ideas.*

[capecodfishermen.org](http://capecodfishermen.org)



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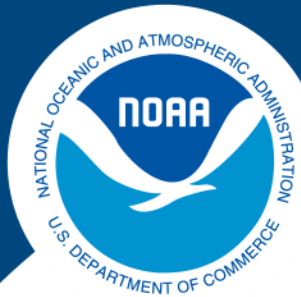


# Strategic Plans

NOAA Fisheries:

- Regulatory Efficiency
- Science for Management
- Technology Transfer
- Informed Public

National Sea Grant Program  
National Ocean Service



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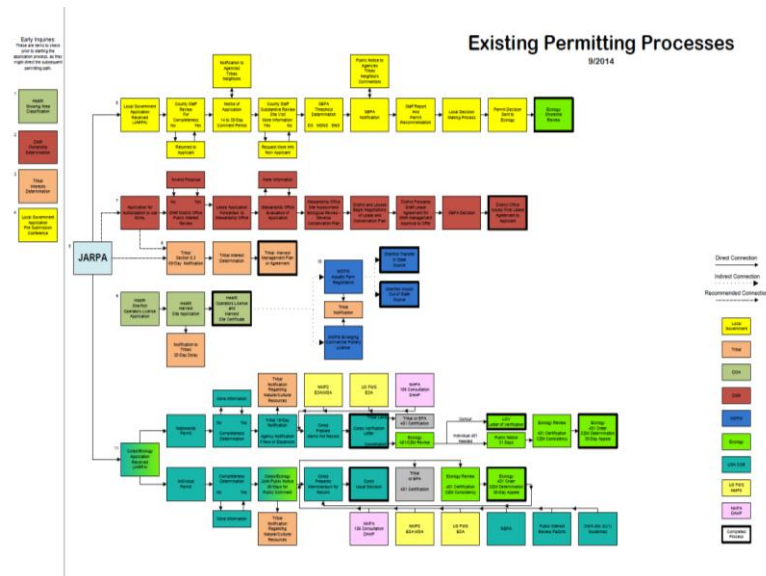
# Regulatory Efficiency

Federal waters:

- Gulf Rule and MOU
- Other regions

State waters:

- Washington – programmatic shellfish permit program with Army Corps
- Shellfish in other districts/regions
- Shellfish permitting best practices
- Net pen farming





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# Science Tools for Management

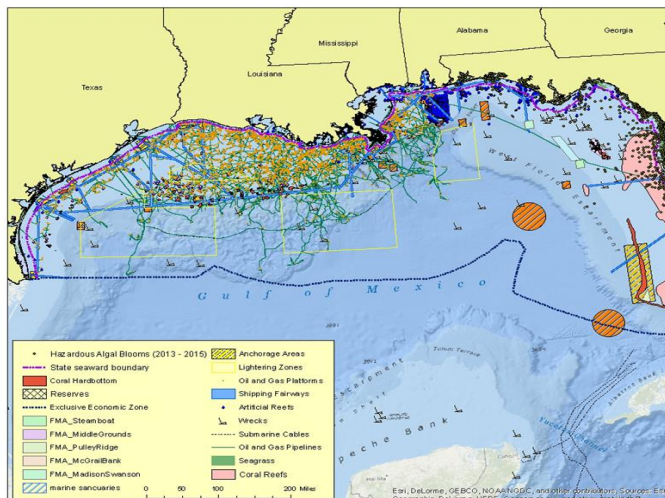
Siting/GIS models

Entanglement risk (report)

Genetics/escapes (validate OMEGA model)

Habitat value of shellfish (studies)

Species restoration: abalone, king crab





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# Technology Transfer

## Grants:

- Saltonstall-Kennedy
- Small Business Innovation Program
- National Sea Grant aquaculture competition

## Federal labs (examples):

- K Chew research hatchery in WA
- Milford lab: algae starter, probiotics
- Sablefish R&D



Image: New Hampshire Sea Grant



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# Grants to Market Example: Alternative Feeds

- USDA/NOAA joint effort to provide leadership and direction
- ARS and NMFS labs
- Sea Grant and SK to extramural labs and companies
- SBIR to specific companies
- FDA approval of Taurine
- Funding by industry – Soy farmers and the F3 Challenge



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# Grants to Market Example: Seaweed Aquaculture

- Pioneering research through Sea Grant and Extension
- SBIR to 3 companies to demonstrate
- SK funded industry research
- NOAA labs providing long term facility for 3 nurseries, science for permitting, and Marine Spatial Planning
- Now of interest to DOE for an order of magnitude increase in funding (\$25M)





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# Informed Public and Outreach

Stakeholder engagement examples:

- Gulf aquaculture roundtable
- Aquariums
- The Nature Conservancy/U of CA Santa Barbara "SNAP" project

Website:

- Content updates, Video
- Press interviews

Shellfish initiatives





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# Other Activities

- Formal peer review of NOAA aquaculture science
- X prize type competition with USDA, industry (in design phase)
- International exchanges (e.g., Japan, Korea, France, Canada)

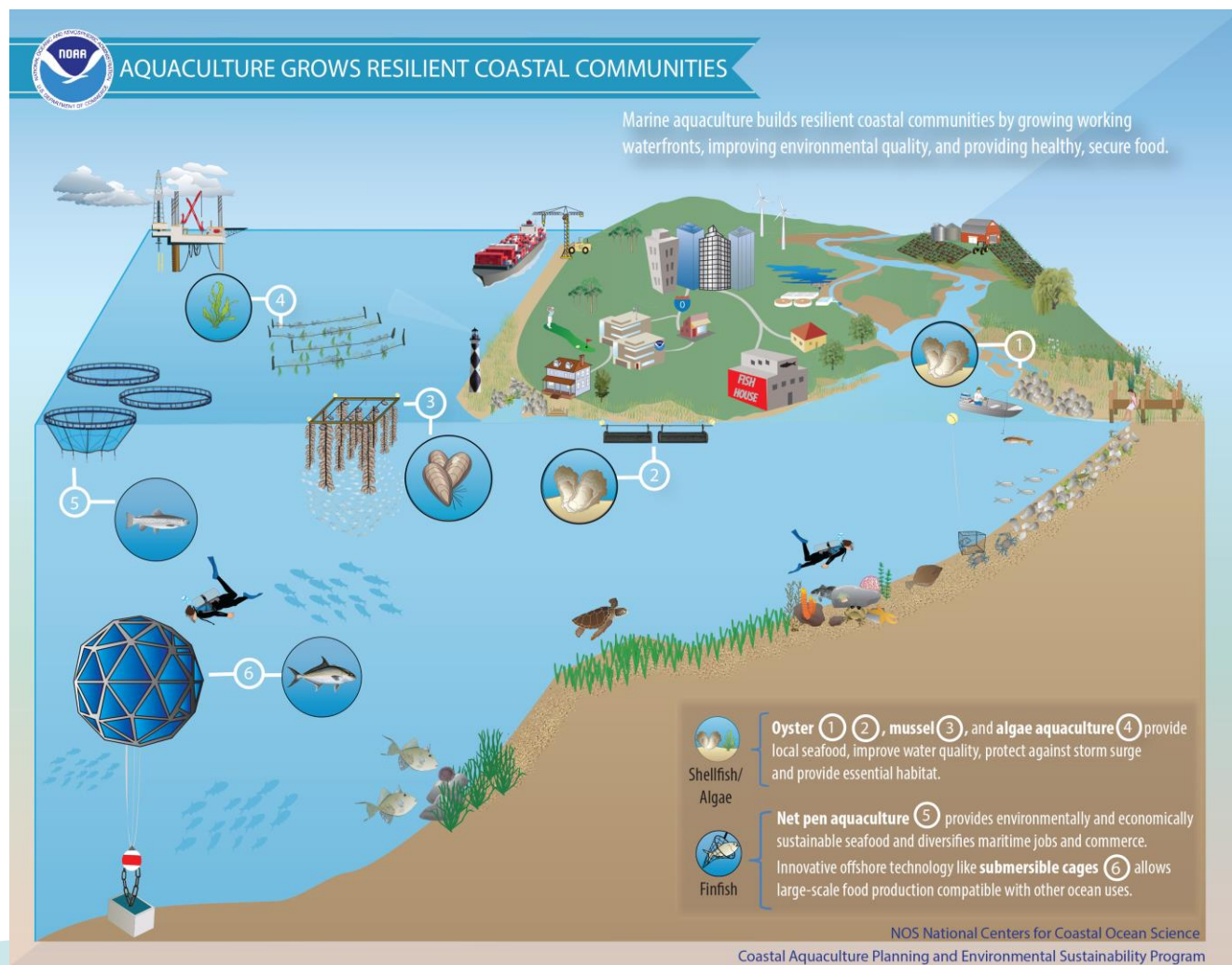




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- ✓ Healthy ecosystems
- ✓ Healthy people
- ✓ Healthy economies

# Ecosystem Based Aquaculture Management





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- Regulatory Efficiency
- Regional/local Public Private Partnerships
- Longer Term R&D and Science

# Moving Forward



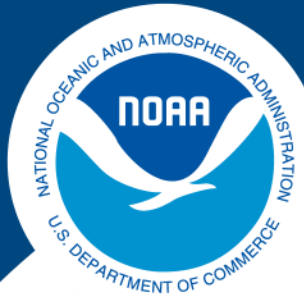


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# Public Private Partnerships to Jump Start Production?

Ideas for partnerships?  
Leverage other funds





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# Longer Term R&D with USDA and Partners

- Genetic improvement
- Feeds
- Aquatic health management
- Species restoration: abalone, king crab, corals, marine fish, salmon





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